

**IN THE CLAIMS**

1. (currently amended) An optical transmitter comprising:  
a planarized header;  
a laser mounted on a plane of the planarized header, wherein  
an axis of light emitted from the laser is parallel to the  
plane; and  
a temperature sensor located on the planarized header for  
generating temperature data over time; and  
laser output power control means, receiving the temperature  
data from said temperature sensor, for adjusting output power  
of the laser based on the temperature data;  
wherein a temperature of the laser is obtained from an output  
of the temperature sensor without application of an offset to  
the output of the temperature sensor.
2. (original) The optical transmitter of claim 1, wherein the  
temperature sensor is within 2.5 mm of the laser.
3. (original) The optical transmitter of claim 1, wherein the  
temperature sensor is within 1 mm of the laser.
4. (original) The optical transmitter of claim 1, wherein the  
laser is a semiconductor laser.
5. (new) The optical transmitter of claim 1, wherein the laser  
output power control means adjusts the DC bias current to the  
laser in accordance with a change in the temperature data to  
maintain the output power of the laser substantially constant  
over time.

In re Patent Application of:

**WOLF ET AL**

Serial No. 10/085,178

Filed: **FEBRUARY 2, 2002**

\_\_\_\_\_/

6. (new) The optical transmitter of claim 5, wherein the laser output power control means adjusts the DC bias current to the laser in accordance with predefined DC bias current values for known temperatures.

7. (new) The optical transmitter of claim 1, wherein the laser output power control means modifies the AC current to the laser in accordance with a change in the temperature data.